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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/740,524	12/19/2000	Ronald W. Hall	7780.650US01 (3M REF.0011	5167

32692 7590 06/30/2005

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EXAMINER	
GRAHAM, ANDREW R	
ART UNIT	**PAPER NUMBER**
2644	

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/740,524	HALL ET AL.	
	Examiner	Art Unit	
	Andrew Graham	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 March 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *23-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *23-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *4/28/05*.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on April 28, 2005 has been considered by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. **Claims 23-25, 27-30, 32, 35, and 37-40** are rejected under 35 U.S.C. 103(a) as being unpatentable over "3M Headset Intercom System Model C960 Operating Instructions" in view of Ruppert et al (USPN 6236969). Hereafter, "3M Headset Intercom System Model C960 Operating Instructions" will be referred to as "3M" and "Ruppert et al" will be referred to as "Ruppert".

3M discloses a headset communication system for a dual lane food service environment, wherein in one mode of operation a user is able to communicate with two different service lanes from a single headset.

Specifically regarding Claim 23, 3M specifies:

A system of programmable headsets ("one base station and one or more headsets", page 1, lines 15-16) comprising:

(a) a plurality of programmable headsets ("one or more headsets", page 1, lines 15-16),

wherein each headset (page 2, "Headset") comprises:

(i) a headband (band connected to and adjusted by 15, left figure, Figure 5, page 5, lines 20-24); and

(ii) an electronics housing (left figure, Figure 5, casing for circuitry and connectors 1-11) including:

(3) a transmitter ("2-way", page iii, line 3; inherent in "transceiver" of "transceiver housing", page 11, line 7) operably connected to the headset signal processing device (e.g., "microprocessor", page 23, lines 2-3, in further view of Ruppert discussed below);

(4) a receiver ("2-way", page iii, line 3; inherent in "transceiver" of "transceiver housing", page 11, line 7) operably connected to the headset signal processing device (e.g., "microprocessor", page 23, lines 2-3, in further view of Ruppert discussed below);

(b) a programming unit ("base station," with Channel Select Button", page 22) comprising

(i) a programming unit signal processing device with an output (circuitry in base station converts a depressed Channel Select switch into a "new channel selection" to be 'read' into microprocessor and changes indicator; "output" is signal applied through base station programming jack after new channel selected and read into microprocessor of base station; pages 22-23); and

(iii) wherein the programming unit signal processing device (circuitry of base station, comprising at least interconnection of Channel Select Button, microprocessor, Reset Switch, Programming Jack, and indicators) is configured to output a signal (via Base Programming Jack) containing the operation frequency ("channel") for the transmitter and the receiver (programming comprises changing channels or radio frequencies; pages iii, lines 2-4; page 1, lines 3-5; page 22, lines 1-3; headset is programmed to same channel as base station, page 23, line 13; new channel selection is first determined in base station, page 23, lines 1-2; programming cable connection and turning headset ON then result in headset being "now programmed" to same channel as base station, causing audible tones, page 23, lines 6-14; connection of cable after selection of channel and reading new channel into microprocessor of base station implies signal is transmitted from base station to headset via the cable; as this connection/signal results in the headset being "now programmed to the same channel as the base station", implicit is that the cable conducts information regarding the new channel selection to the headset; also considered in view of Ruppert, as discussed below, which denotes the passing of an electrical signal to control circuitry, which includes RF tuning control capabilities, col. 10, lines 16-26)

However, 3m does not specify:

a headset infrared light detector arranged to receive infrared light signals, convert the infrared light signals into electric signals and supply the electric signals to an output, the headset

infrared light detector being located in a detector portion of the electronics housing;

a headset signal processing device with an input coupled to the output of the headset infrared light detector for processing the electric signals supplied by the headset infrared light detector;

a programming unit infrared light emitter operably connected to the output of the programming unit signal processing device

wherein the programming unit signal processing device is configured to output a signal to the programming unit infrared light emitter to the headset infrared light detector

Ruppert teaches a communication system comprising a headset and a base station with a variety of features, one of which is means to transmit and receive information via both infrared and radio frequency signals. The IR communication interfaces are intended for data transfer between the headset and the base station as well as other devices (col. 6, lines 63-66 and col. 7 lines 13-21). Control signals input through the headset (10) are disclosed as being able to alter the tuning of the RF circuitry as well as effect data transmission over the I/R interface (col. 10, lines 23-32).

Specifically regarding Claim 1, Ruppert discloses:

a headband (12)(col. 3, lines 56-60); and

an electronics housing (14,16)(col. 3, lines 58-65) including:

a headset infrared light detector (89) arranged to receive infrared light signals (from 88), convert the infrared light signals into electric signals (inherent for use of infrared signal by standard

integrated circuit board implementation of electronics components(30 or 32) (col. 4, lines 60-65)) and supply the electric signals to an output (into 32 or to 97)(col. 7, lines 2-4 and 61-64),

the headset infrared light detector (89) being located in a detector portion (located on the underside of mouthpiece (16) or variety of locations on headset (col. 7, lines 1-12));

a headset signal processing device (32 or combination of 32 and 97) with an input coupled to the output of the headset infrared light detector (89) for processing the electric signals supplied by the headset infrared light detector(89)(col. 7, lines 2-4; col. 10, lines 56-58);

(3) a transmitter (integrated into 30) operably connected to the headset signal processing device(32)(col. 7, lines 23-30);

(4) a receiver (integrated into 30) operably connected to the headset signal processing device (32)(col. 7, lines 23-30);

(ii) a programming unit infrared light emitter (88) operably connected to the output of the programming unit signal processing device (circuitry that apples data from serial cable 86 to IR interface, col. 6, lines 60-66, in view of circuitry interconnecting at least Channel Select Switch, microprocessor, and Base Programming Jack of 3M)(col. 6, lines 64-66; Figure 3, both of Ruppert)

(iii) wherein the programming unit signal processing device (circuitry interconnecting 86 and 88) is configured to output a signal to the programming unit infrared light emitter (88, in view of programming jack of 3M) (col. 6, lines 63-64)… for transmission by the

programming unit infrared light emitter (88 in 70) to the headset infrared light detector (89)(col. 7, lines 2-4)

To one of ordinary skill in the art at the time the invention was made, it would have been obvious to include the IR communication interface of Ruppert into the headset of the applicant's admitted prior art. The motivation behind such a modification would have been that such a port would have enabled additional, frequency independent wireless communication to be conducted through the headset along with the radio communications of the system. Such a port would have been particularly useful for two way data transfer between the radio-communications enabled headset and base station of 3M and devices such as a computer, printer, ATM, or other peripheral device. Ruppert also notes an IR transmission scheme that would have enabled secure transmissions to be made. Ruppert also teaches that a single base station may issue broadcast communications over the I/R band, which suggests that implementing such I/R interface on the base unit and headsets of 3M would have enabled multiple headsets to access transmitted data.

Regarding **Claim 24**, 3m in view of Ruppert discloses:

(a) wherein the electronics housing (comprising 14,16 of Ruppert) of the headset further comprises a headset infrared light emitter (part of 89) operably connected to an output of the headset signal processing unit (comprising at least 32) (part of 89 in view of the IR ports (88,89) enabling full duplex communication between the headset (10) and other data transmission devices, along with the

communications between the headset (10) and base unit (70); col. 7, lines 16-21 and col. 10, lines 26-34 and 54-59, all of Ruppert)

(b) wherein the programming unit further comprises a programming unit infrared light detector (part of 88 of Ruppert) arranged to receive infrared light signals (duplex communication, col. 7, lines 16-18; col. 10, lines 29-32), convert the received infrared light signals into electric signals (implicit, as data is sent through serial interface 86) and supply the electric signals to an input of the programming unit signal processing device (computer of Ruppert in view of microprocessor and interconnecting circuitry of 3M)(full duplex communication between the headset (10) and computer which may be connected to base unit (70); col. 7, lines 16-21 and col. 10, lines 26-34 and 54-59, all of Ruppert)

Regarding **Claim 25**, Ruppert discloses that multiple IR ports in various locations may be provided on the device, and the port depicted (88) is located on the bottom of the mouthpiece (16) towards the speaker end of the electronics housing (14) (col. 7, lines 8-11). These teachings read on "the detector portion of the electronics housing is located at an end of the electronics housing".

Regarding **Claim 27**, the mouthpiece (16) of Ruppert's invention includes a microphone (18) and a speaker (20), which reads on "the headband includes a speaker and a microphone" (col. 4, lines 10-12). Ruppert also discloses that electrical connections (28,29,50,60) exist between the electronics housing and such components contained on the headband (col. 4, lines 40-44; col. 5, lines 21-37). These physical

contacts and the physical, electricity-conducting paths to which they correspond, such as illustrated for (28), read on "the headband is operably connected coupled to the electronics housing by a wire connection".

Regarding **Claim 28**, the mouthpiece (16) of the component enclosing portion (14,16) of Ruppert's invention includes a microphone (18) and a speaker (20) and is connected through another electronics housing (14) to the headband (12), which reads on "the electronics housing is attached to the headband" and "includes a speaker and a microphone" (col. 4, lines 10-22 and Figure 1). The electronics housing of 3M is also connected to the headset (Figure 5, page 4).

Regarding **Claim 29**, the system of 3M includes circuitry for receiving channel selection inputs, reading the new selected channel into a microprocessor, and transmitting a signal through a programming cable jack in one housing. The system of Ruppert, however, involves a separate data generating and processing device, a computer, and transmitting component, base unit (70). Ruppert discloses that serial data is passed through the base unit (70) by the infrared port (88), wherein the serial data is obtained through a serial data port (86) from a data source such as a computer (col. 6, lines 60-63). In view of the processing performed in the system of 3M, the computer or devices externally connected through the telephone jack in the system of Ruppert reads on ""further comprising a base unit connected to the programming unit" (col. 10, lines 29-32). Computers and conventional telephone devices are substantially well known in the art to include

physical input consoles or controls, such as keyboards or keypads, which reads on "the base unit comprising a control panel".

Regarding **Claim 30**, the base unit (70) of Ruppert includes volume control switches (76,77), as does the base station of 3M among other controls, which reads on "the programming unit further comprises a control panel" (col. 6, lines 20-22 of Ruppert; pages 22-23 and Figure 21-23 of 3M).

Regarding **Claim 32**, 3M in view of Ruppert teaches:

A method of programming a headset comprising (page 23 of 3M):

positioning a detector portion (14, 16 of Ruppert with mounted 89 thereon) of a headset (10)(headset of 3M in view of 10 of Ruppert) near a programming station (base station of 3M in view of base unit 70 of Ruppert)(Figure 22 of 3M, and col. 10, lines 26-39, at least "near" by virtue of 89 on 10 and 10 used with 70 in office),

where the headset (10) comprises a headset infrared light detector (89) for receiving signals from a programming station infrared light emitter (88)(col. 6, lines 60-67; col. 7, lines 1-4 of Ruppert),

wherein the headset includes a transmitter and receiver (col. 7, lines 22-30 of Ruppert);

transmitting an infrared light signal from the programming station infrared light emitter (88 on base unit 70 of Ruppert in view of base programming jack on base station of 3M) to the headset infrared detector (89 on headset of Ruppert in view of programming

jack on headset of 3M, Figure 23)(col. 6, lines 63-66 of Ruppert; page 23 of 3M),

where the signal contains information regarding the operating frequency for the transmitter and receiver of the headset (after establishing new channel selection in base station of 3M, the selection is 'read' into microprocessor of base station of 3M, and then programming cable is connected to headset to program new channel to headset, pages 22-23 of 3M; as new channel selection can be represented in electronic form by virtue of 'readable' into microprocessor, and programming of headset occurs after connection of programming cable, implicit is the sending of signal from base station to headset, wherein signal includes information regarding new channel selection; this signal is considered in view of data transfer in system of Ruppert, as cited above)

setting the operating frequency of the transmitter and receiver of the headset in response to the signal (function of cable connection resulting in "headset is now programmed to the same channel as base station", page 23 of 3M; in further view of use of electronic signal in Ruppert used to tune RF frequency, col. 10, lines 16-26).

Regarding **Claim 35** please refer above to the components cited in the rejection of the similar limitations of Claims 23 and 32, particularly the rejection of set (a) limitations of Claim 23 and the "setting" limitation of Claim 32.

Regarding **Claim 37**, please refer above to the grounds of rejection cited in relation to the similar limitations of Claim 25.

Regarding **Claim 38**, please refer above to the grounds of rejection cited in relation to the similar limitations of part(c) of Claim 26.

Regarding **Claim 39**, please refer above to the grounds of rejection cited in relation to the similar limitations of Claim 27.

Regarding **Claim 40**, please refer above to the grounds of rejection cited in relation to the similar limitations of Claim 28.

3. Claims 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over 3M in view of Ruppert as applied above, and further in view of Takahashi et al (USPN 6525854). Hereafter, "Takahashi et al" will be referred to as "Takahashi".

As detailed above, 3M discloses a headset communication system for a dual lane food service environment, wherein in one mode of operation a user is able to communicate with two lanes from a single headset. Ruppert discloses a communication system comprising a headset and a base station, along with the means to transmit and receive information via both infrared and radio frequency signals. Specifically regarding Claim 26, Figure 3 of Ruppert illustrates the base unit (70), which includes a support recess (81) that reads on "a cradle for receiving the detector portion of the headset" (col. 6, lines 27-41). This base unit (70) includes a serial interface jack (86), through which an attached computer may provide and receive

serial data (col. 6, lines 60-63). 3M discloses the programming of the headset through the use of a base station and programming cable (page 3; page 22, Figure 22). The combination of a base unit (70) and a computer of Ruppert in two units for transmitting, in view of the particular programming functions and signal output included in the base station of the system of 3M, as noted above in regards to Claim 23, collectively reads on "a programming unit". The IR interface ports (88,89) of Ruppert are illustrated as defined panels on the headset (10) and base (70) of Ruppert, the construction of such a well-known, infrared-passing component reading on "the detector portion of the headset and the cradle include at least a window of infrared transparent material" (Figures 1 and 3 of Ruppert).

As can be seen in Figure 3 of Ruppert, the IR port (88) of the base station (70) is located within the support recess (81). Ruppert also discloses that the IR ports of the headset may numerously and variously be positioned (col. 7, lines 8-11).

However, 3M in view of Ruppert does not clearly specify:

- that the infrared light emitter is positioned for infrared light communication with the headset light detector when the detector portion is positioned in the cradle

Takahashi teaches a portable radio communication device with an infrared communication function that enables wireless data transmission.

Specifically regarding **Claim 26**, Takahashi discloses:

infrared light emitter (21B) positioned for infrared light communication with the headset light detector (10A) when the detector portion is positioned in the cradle (col. 7, lines 9-10; col. 8, lines 16-17 and 40-52; col. 9, lines 41-48)

To one of ordinary skill in the art at the time the invention was made, it would have been obvious to align the IR ports in the headset and cradle of 3M in view of Ruppert in a manner that would have enabled IR communication while the headset is positioned in the cradle, as is disclosed by Takahashi. The motivation behind such a modification would have been that such an arrangement would have enabled IR communication to take place between the cradle and headset when operating conditions for the headset allow the headset to be placed in the cradle. Such operating conditions would have included charging of the battery, as suggested by Ruppert, hands-free operation of the radio telephone, as suggested and enabled by Takahashi, or while the headset is being stored or otherwise not in use, as would have been recognized by one of ordinary skill in the art.

4. **Claim 31** is rejected under 35 U.S.C. 103 (a) as being unpatentable over 3M in view of Ruppert and Takahashi as applied above, and in further view of well known prior art.

As detailed above, 3M discloses a headset communication system for a dual lane food service environment, wherein in one mode of operation a user is able to communicate with two lanes from a single headset. Ruppert discloses a communication system comprising a

headset and a base station, along with the means to transmit and receive information via both infrared and radio frequency signals. Takahashi discloses a radio telecommunications device with included infrared communications components for data transfer.

3M in view of Ruppert and Takahashi does not disclose:

- that the base unit, or programming unit, is wall mountable

However, the Examiner takes Official Notice that the concept of mounting the base unit of a portable communications device is substantially well known in the art. The base unit of a portable telephones is one particular component of a communication device that is specifically well-known in the art to be wall mountable.

To one of ordinary skill in the art at the time the invention was made, it would have been obvious to make the base unit of the invention of 3M in view of Ruppert and Takahashi to be wall mountable, as is well known art. The motivation behind such a modification would have been the space-saving advantages of a unit that mounts to a wall as opposed to one that sits on a shelf, countertop, or other horizontal surface. Telephone connections are also commonly built into the walls of houses and other shelter-type structures, and mounting the base of a communications device on the same or nearby wall would have minimized the amount of wire needed to properly connect the communication device as well as limited the physical exposure of the connection wire. This statement of well-known in the art has been made in previous office action(s). The statement is hereby taken to be admitted prior art because applicant has not

traversed the examiner's assertion of official notice, per MPEP 2144.03.

6. **Claims 33-34 and 36** are rejected under 35 U.S.C. 103 (a) as being unpatentable over 3M in view of Ruppert as applied above, and in further view of Lee et al (USPN 5247380). Hereafter, "Lee et al" will simply be referred to as "Lee".

As detailed above, 3M discloses a headset communication system for a dual lane food service environment, wherein in one mode of operation a user is able to communicate with two lanes from a single headset. Ruppert discloses a communication system comprising a headset and a base station, along with the means to transmit and receive information via both infrared and radio frequency signals. As discussed above, Ruppert discloses that the base station is able to alter the operation settings of the headset. Specifically, the headset of Ruppert can be awakened from a standby mode depending on selected transmission protocols (col. 10, lines 59-61).

While a valid communication link between these two devices is required for the control signal to be sent, 3M in view of Ruppert does not disclose:

the indicating of a ready condition for receiving programming signals through sending an infrared signal from the headset to the programming station

Lee discloses an infrared communications network for ensuring connection and error free transmission between the devices in the

network. As can be seen in Figure 1A, each transmission interface device in the network (24,26,30) includes a transmitter and receiver. Figures 4A-8 illustrate the process flow of the invention. Figure 4C illustrates the manner in which baton packets are transmitted to determine if components are responsive and are thus in service (col. 7, lines 7-27; col. 10, lines 24-48). The affirmative or responsive condition of a transmission interface device reads on "indicating a ready condition for receiving a programming signal of the headset by transmitting an infrared light signal from a headset IR detector emitter to a programming station IR detection emitter".

To one of ordinary skill in the art at the time the invention was made, it would have been obvious to include the handshake protocol for determining the connected devices in the system of Lee into the infrared communications protocols of the invention of 3M in view of Ruppert. The motivation behind such a modification would have been that such a communication procedure would have enabled the base station broadcasting to determine if the infrared link has a status of ready or down/out-of-service as well as adapt to frequent changes in this status, as is taught by Lee. The teachings of Lee also enables more than two devices to be connected and configured in the same system.

Regarding **Claim 34**, the condition of a node in the teachings of Lee as being responsive to a baton packet involves the nodes being 'on' in some manner. Ruppert discloses that the base station includes the ability to awake the headset from a standby condition in response

to a transmission (col. 10, lines 59-61). The positive application of battery power to a transceiver and corresponding signal processing circuitry in a node device such as a headset, corresponds to a such an "on" condition and is inherently required for the above responses to occur. Such a property reads on, "the step of indicating a ready condition further comprises turning the headset on". It is further noted that 3M teaches the step of turning a headset "ON" as preceding the result of completed headset programming (page 23).

Regarding **Claim 36**, please refer above to the rejection of the similar limitations of Claim 24 regarding the "emitter" and Claim 33 regarding the transmission of a "ready signal".

Response to Arguments

Applicant's arguments filed March 7, 2005 have been fully considered but they are not persuasive.

The applicant's remarks, page 7, line 7 through page 9, line 13 involve the teachings of Ruppert and the newly amended limitation of the "signal to the programming unit infrared light emitter containing the operation frequency for the transmitter and the receiver". On page 8, lines 24-25, the applicant has stated, "The other cited references do not supply this missing teaching of Ruppert". The examiner respectfully disagrees. In considering the disclosure of a reference, it is proper to take into account the inferences which one skilled in the art would reasonably be expected to draw therefrom. As applied in the above rejections, the reference of 3M (pages 22-23) suggests the sending of new channel information over the cable between

the base station and the headset. This suggestion is based on the fact that the new channel information is first "read" into to microprocessor of the base station, before an interconnection is made between the base station and headset by a programming cable. After the interconnection is made, the headset is programmed to the new channel, which suggests that information sufficient to enable this new channel setting in the headset is transmitted by the cable. The reference of Dress et al (USPN 6519448) has been provided herein as evidentiary support that such physical connections are known in the art as enabling frequency programming, as is also suggested by the applicant's admitted prior art (page 1, lines 22-26). Accordingly, replacing this cable with an infrared connection for data transfer, as taught by Ruppert, would have yet enabled such information to be transmitted between the base and headset. The cited teachings of Ruppert further support the notion implicit in 3M, that an electric signal can be used to tune the RF communication frequency. Accordingly, such a limitation is considered to be taught in view of the combined disclosures of 3M and Ruppert.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Graham whose telephone number is 571-272-7517. The examiner can normally be reached on Monday-Friday, 8:30 AM to 5:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AG
Andrew Graham
Examiner
A.U. 2644

ag
June 26, 2005

VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600